



# PIER Energy-Related Environmental Research

Environmental Impacts of Energy Generation, Distribution and Use

## Avian Powerline Interaction Committee

**Contract #:** 500-97-010-06

**Contractor:** Pacific Gas and Electric (PG&E)

**Contract Amount:** \$40,000

**Contractor Project Manager:** Sheila Byrne

**Commission Contract Manager:** Dick Anderson

### Project Description

This project developed a course on reducing bird electrocutions and electric power disruptions associated with bird collisions with powerlines as part of PG&E's involvement in the Avian Powerline Interaction Committee (APLIC). The APLIC is an internationally recognized organization with approximately a dozen utilities, as well as the U.S. Fish and Wildlife Service and the Audubon Society, as members. It is dedicated to developing methods to mitigate the impact of powerlines on birds. Bird collisions with powerlines result not only in transmission line outages, but also harms or kills rare and endangered species.

### PIER Program Objectives and Anticipated Benefits for California

This project offers numerous benefits and meets the following PIER program objectives:

- **Improving the reliability/quality of California's electricity** by providing interested parties with current technical information on how to reduce bird collisions with powerlines, thereby lessening or preventing power outages resulting from these collisions.
- **Improving environmental and public health costs/risk of California's electricity** by providing information to reduce bird mortality associated with powerline collisions.

### Results

The short course, entitled "Reducing Bird Collisions and Electrocutions," was held in May of 1998 at PG&E's Livermore Training Center. The short course provided an excellent forum for information exchange regarding causes and solutions for many types of bird electrocution and collision fatalities and associated power outages. Measures presented to reduce bird electrocutions included special insulation for potential electrocuting contact points and using an electrocution-proof configuration design in the construction of new powerlines. Measures discussed to reduce collisions included avoiding high bird use areas in siting of new powerlines and attaching various shaped devices (bird flight diverters) in order to alert birds to the hazard and allow them to avoid the line. Information was distributed to course attendees that will allow them to evaluate existing structures and recommend measures, as needed, to decrease adverse

bird interactions with utility structures. The short course was well attended and received high marks by attendees.

### **Final Report**

This project's final report is entitled, *Avian Powerline Interaction Committee* (600-00-028), and is available from the California Energy Commission website, at: [www.energy.ca.gov/reports/2002-01-10\\_600-00-028.PDF](http://www.energy.ca.gov/reports/2002-01-10_600-00-028.PDF).

### **Contact**

Dick Anderson • 916-654-4166